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VILLAGE OF DOWNERS GROVE Report for the Village 12/3/2024

SUBJECT:	SUBMITTED BY:
Guiding DG: Comprehensive Plan and Related Projects -	Stan Popovich, AICP
Environmental Sustainability Plan Draft Introduction and Vision	Director of Community Development

SYNOPSIS

The Village and our Environmental Sustainability Consultant, GZA, will be presenting the Environmental Sustainability Plan's (ESP) draft introduction and vision sections.

STRATEGIC PLAN ALIGNMENT

The Village Council has identified the Comprehensive Plan and related projects as Priority Action Items for 2023-2025.

FISCAL IMPACT

N/A

RECOMMENDATION

It is recommended that Council discuss the draft introduction and vision sections as presented and confirm the content or suggest modifications.

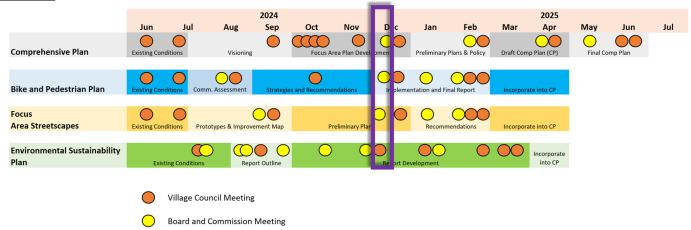
BACKGROUND

The Village and our Environmental Sustainability Consultant, GZA, will be presenting the Environmental Sustainability Plan's (ESP) draft introduction and vision sections. These are the third and fourth sections of the ESP outline that was presented to the Village Council on September 3, 2024. Sections 1 (Cover Page) and 2 (Executive Summary) will be completed during the final formatting of the plan. An initial draft of the introduction and vision was presented to the Environmental Concerns Commission (ECC) on October 28, 2024. The feedback provided by the ECC has been incorporated into the draft.

The purpose of this presentation and Council discussion is to reach an agreement on the introduction and vision that will provide guidance to move forward with the development of the ESP.

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Schedule



ATTACHMENTS

Draft ESP Introduction and Vision sections
Draft Minutes of the Environmental Concerns Commission dated October 28, 2024

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Key Terminology

Community	Downers Grove	Village
When the term community is used in this plan, it describes people and organizations. This includes residents, businesses and their employees, and other community organizations	When the term Downers Grove is used, it describes the geography of the community and properties located within the municipal boundaries	The term Village will be used to describe the Village of Downers Grove as the corporate authority and municipal organization

Introduction - A Greener Future

Downers Grove is one of 284 municipalities that make up the Chicago metropolitan region. It is both centrally located and well connected to the rest of the region, making it a desirable place to call home and do business. As one of Chicago's larger suburbs, Downers Grove is home to more than 50,000 residents and a place where more than 50,000 individuals work. In all the ways that Downers Grove contributes to the economic vitality and cultural vibrancy of the region, it also contributes to a local, regional, and global environmental burden.¹

In 2023, the Village of Downers Grove committed to do more to reduce its environmental footprint by joining the Greenest Region compact, a sustainability initiative that seeks to coordinate environmental efforts in the Chicago region. The creation of the Village's first Environmental Sustainability Plan (ESP) is a step towards embracing the benefits of nature, seeking ways to be a more sustainable community, and enhancing the character of the community through actions that provide long-term value to those who live and work here.

Achieving the goals laid out in this plan will not happen all at once. Instead, this plan sets a course and serves as a guide for investing the community's human, natural, social, political, and economic capital. It establishes an aspirational vision with goals and objectives to guide actions and decisions. While becoming a more sustainable community will take decades, the actions identified in this first ESP will start setting new trends like reducing the consumption of energy

¹ Key Fact: Urban regions are responsible for 80% of global GDP and 85% of global GHG emissions. Suburban communities are responsible for about 50% of emissions in the US, largely due to car dependent development patterns and higher square footage residential dwellings that consume more

energy.

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and resources,² improving biodiversity³ and ecological connectivity,⁴ increasing community resilience,⁵ and promoting a culture of stewardship and thoughtfulness.⁶

A key feature of the ESP is the organization of its goals, objectives, and proposed actions. During the development of this plan, Village leadership discussed whether the scope of the plan should be on the Village as an organization or the community as a whole. It was determined that promoting positive changes and progressing towards a vision of a more sustainable community requires a collective effort. Although the ESP includes a vision and goals for the community, it also acknowledges the important role of the Village as a leader. The Village can influence positive actions through service delivery and seek ways to ease pathways for residents and businesses to act in a more sustainable way.

The ESP is also a call to action to the community that centers around a collective pledge. The pledge invites the community to be a part of the effort and also helps identify different actions that individuals, families, and organizations can take to support community sustainability goals. The ESP and the community pledge are not exhaustive lists of goals and actions. They are a starting point and will evolve as progress is made in some areas, challenges and opportunities are identified, and as we collectively learn. There is a place and role for everyone in this plan, not just those that are most passionate about the environment. Every member of the community is encouraged to be involved.

² Key Fact: The Greenest Region Compact has established a collective goal to reduce regional GHG emissions 50% from a 2005 baseline by 2030 and 80% by 2050. Background information about these goals and strategies to achieve the goal have been outlined in the 2021 Climate Action Plan for the Chicago Region.

³ Key Fact: Biodiversity is an important measure of the health of the environment. The loss of biodiversity has a cascading impact on other species, ecosystems, and can reduce quality of life for people. As a key indicator for planetary boundaries, biodiversity is considered to be rapidly declining and a serious issue.

⁴ Key Fact: An Existing Conditions Memo key takeaway was that biodiversity and connectivity between various natural areas were an area for improvement

⁵ The Climate Risk Assessment in the ECM found that there are heightened risks for natural disasters based on climate modeling for 2050 and 2100.

⁶ Key Fact: A key takeaway from public engagement was the need to develop a culture of environmental stewardship within the community.

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Background - A History of Downers Grove's Relationship with the Environment

When Pierce Downer, the founder of Downers Grove, arrived to the area in 1832, he set up camp in a small grove of bur oak trees and staked his claim to 160 acres of surrounding prairie and timberland. The valuable timber hardwood and fertile prairie soils provided the necessary resources for our vibrant community to be established. Shortly after, John Deere's steel plow was released to the public, playing an important role in transforming the state and allowing it to grow. By 1860, Illinois' population expanded from 157,000 to 1.7 million people and a majority of its 22 million acres of tallgrass prairie was turned over to make way for agricultural crops. Today, less than 0.01% of Illinois' original prairie acreage remains, but a small sliver of remnant prairie still exists in Downers Grove.

Belmont Prairie, a roughly 10-acre protected nature preserve, represents the way pioneers saw the area in 1832 when they settled here. The area was protected from development during the 1970s thanks to the efforts of conservation-minded Downers Grove residents that took action to purchase and protect the land. In 1979, Belmont Prairie was dedicated as the 75th State of Illinois Nature Preserve. In addition to Belmont Prairie, the Village and the community have worked together to preserve and protect other native ecosystems. Lyman Woods, a 150 acre preserve of old-growth oak forest, prairie, and marshlands, was protected in the 1980s through a partnership between the Village, Downers Grove Park District, and DuPage County Forest Preserve District.

As Downers Grove expanded, the land-use transition continued as cropland was in turn replaced with residences, businesses, transportation corridors, and other infrastructure. Today the community is largely built out with almost no undeveloped land. Nevertheless the community has demonstrated a commitment to preserve elements of our natural environment, and a sense of coexisting with nature. Downers Grove has a system of parks and other open spaces, nature preserves, and an extensive urban forest. With more than 22,000 parkway trees, the Village has been designated as a Tree City USA community for 40 consecutive years and is one of 18 communities that is an Urban and Community Forestry Society accredited city. Not only does the urban forest contribute to the charm of the community, it plays a vital role in reducing the impacts of the urban environment.

Another important investment and step towards community resilience in the 21st century is the Village's stormwater utility. Since its inception in 2012, the Village has invested more than \$60 million dollars to mitigate the risk of urban flooding throughout the community. As one of the first stormwater utilities in the region, the Village strives to be better prepared for increasing intensity of precipitation events due to climate change. The Village also embraced nature's natural assets through green infrastructure design on both public and private property. This strategy has both reduced flooding for residents and introduced more habitat for pollinators throughout

In addition to managing natural assets and restoring habitat when possible, the Village has sought to reduce its impact on the environment for the past 15 years. Innovative solutions, such as biofuels, precision salting, and green procurement have resulted in hundreds of metric tons of greenhouse gas emissions being avoided, cleaner air and water, and numerous awards.

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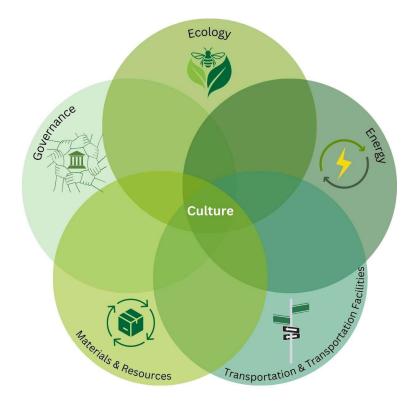
Most recently, the Village became one of the newest members of the Greenest Region Compact (GRC) in 2023. While considering the GRC, the Village reviewed past and current sustainability efforts and determined that while a lot of effort and intention was happening regularly,⁷ a more systematic approach would be beneficial. Joining the GRC is just one of many reasons this ESP was created. As we look forward, this ESP will be guiding Downers Grove's sustainability efforts so the community can preserve a healthy environment for future generations.

⁷ See GRC staff report presented to Village Council on March 7, 2023.

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Environmental Sustainability Plan Organization

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About the Vision Section

The ESP vision section includes both an overall vision statement and five supporting vision themes. The overall vision statement is intended to capture the ideal outcomes of meeting the objectives of the ESP. Five themes (ecology, energy, transportation and transportation facilities, materials and resources, and governance) support the overall vision statement while capturing the breadth of sustainability and the connections between them. Each theme includes background information and a thematic vision statement. The background describes the primary environmental issues while linking the past to the present. The thematic vision statements are aspirational statements describing what can be achieved in that area. Within each theme is also a set of high-level community goals and key recommendations for Village action that align with the thematic vision statements.

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Guiding DG Comprehensive Plan Vision Excerpt (call out box)

Downers Grove will respect its natural resources by being a more sustainable and livable community that consists of permanently preserved open spaces, biologically rich native landscapes, green stormwater management systems, and healthy relationships with nature. Downers Grove will be resilient in the face of intensifying climatological events. Sustainability efforts will be embraced throughout the community. Downers Grove will benefit from interrelated connections between natural systems, walking paths and trails, and a vibrant urban canopy of trees native to the area.

Overall Vision Statement

Through a collective effort between the Village, other governmental partners, and the community, Downers Grove will become a model sustainable suburban community. While many of the defining characteristics of the community will remain, Downers Grove will find innovative ways to reduce its impact on the environment and promote equitable benefits through effective communication and collaboration, thoughtful planning and investment, and shared values for the natural world.

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Energy Background

At the core of the modern relationship with nature is energy. The ability to harness and transform natural resources into energy has allowed great things to be accomplished, but has resulted in detrimental impacts to the natural world. Much of today's electricity and transportation needs are reliant on fossil fuels that are driving climate change. Moving forward, there is an opportunity for Downers Grove to transition to renewable sources of energy. This will require concerted efforts to both reduce existing energy demand and invest into renewable energy technologies.

Energy Vision

Diligent planning and investment will help preserve⁸ houses and buildings while significantly improving energy efficiency and reducing building-related emissions. Redevelopment and new construction will meet or exceed current building and energy conservation codes in a way that minimizes future greenhouse gas emissions. Downers Grove will also be a regional leader in the amount of renewable energy that is generated and stored locally. Property owners who are not able to meet their renewable energy goals directly on-site will have multiple options to purchase renewable electricity.

Community Energy Goals

- Work towards becoming a carbon-neutral community
- Reduce building-related energy use through energy-efficiency retrofits and upgrades
- Find innovative ways to partner with other organizations to decarbonize¹⁰ energy sources while maintaining a robust and resilient grid
- Expand options for residents and businesses in Downers Grove to purchase renewable electricity

Village Energy Key Recommendations

- Strive to become a carbon-neutral organization by 2035 and carbon-negative 11 by 2045
- Purchase 100% renewable energy for Village-owned facilities while working towards self-generating renewable energy
- Determine the most appropriate way to implement energy conservation and energy efficiency retrofits

⁸ Adaptive reuse and preservation of existing structures reduces the community's overall environmental impact by limiting the amount of resources consumed for new construction, construction related emissions, and the debris created by demolition.

⁹ Carbon neutral is a point at which the amount of GHG emissions being generated by the community or an organization are equal to the amount that is being removed through natural processes or through market-based mechanisms such as carbon offsets

¹⁰ Decarbonization involves a transition to energy sources that do not produce specific greenhouse gasses, such as solar, wind, hydro, or nuclear power

¹¹ Carbon negative is a point at which the Village would emit fewer greenhouse gasses than it produces, either through natural processes such as the carbon captured by parkway trees or through some alternative and appropriate carbon offset program

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Ecology Background

The ecological web¹² is defined by its complexity and interdependence¹³ of both the biotic (living creatures) and abiotic (nonliving things such as land, water, and air). Within this complex web of life, everyday actions can have a positive or negative impact on the environment. For decades, humanity's general relationship with nature in the places where we live, work, and play has generally not been sustainable. This can be seen in the declining quality of waterways; rapidly declining biodiversity; increasing soil erosion; the amount of debris and plastic in the oceans; rapidly intensifying storms; and urban heat islands created by paving over nature. Reversing this damage will take generations, but increased awareness and collective action have the potential to turn the tide.

Ecology Vision

Every home, business, and institution within Downers Grove will find a way to give back to nature rather than take more from it. Holistic efforts by the community will result in diverse habitats that are connected, clean air and water, and more biodiversity. The result will be a healthier and more resilient environment for all living creatures that also contribute to the charm of Downers Grove's neighbrhoods and public spaces.

Community Ecology Goals

- Increase biodiversity and habitat connectivity throughout Downers Grove
- Maintain a healthy urban forest
- Improve water quality in local waterways
- Support the conservation of potable water
- Reduce light pollution

Village Ecology Key Recommendations

- Actively improve biodiversity and habitat restoration on Village properties and through partnerships with other local government entities
- Explore becoming a Dark Sky Community
- Prioritize nature-based solutions to reduce risks associated with climate change and improve the quality of water in waterways
- Continue and expand the use of public spaces as native landscaping demonstration gardens
- Avoid the use of chemicals that harm plants and impact water quality
- Continue to maintain the lowest possible leakage throughout the Village's water system

¹² The collective network of living and non-living things that have interconnected relationships based on predation, competition, and symbiosis.

¹³ Changes in the overall health of a specific species or quality of environment can result in the changes of other species, which may or may not be directly connected in the ecological web

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Materials and Resources Background

Early settlers in Downers Grove relied on the area's natural resources that were available to them. Although the community no longer relies on extracting natural resources within Downers Grove, the products and services consumed here are made by resources from elsewhere. The community's drinking water comes from Lake Michigan. The community's energy is mostly from fossil fuels extracted across North America. Some of our food supply and most consumer goods consumed are sourced from other countries. The community also produces more than twice as much garbage as what is recycled, all of which ends up in landfills outside DuPage County. Purchasing choices have impacts beyond the community. Conscious consumption will allow for the greatest ability reduction of environmental impacts at a larger scale.

Materials and Resources Vision

There will be widespread awareness about the impacts of daily choices, especially around how different goods and services impact the environment. Thoughtful purchasing choices will result in a greater preference for supporting local businesses and regionally produced goods. Greater awareness of waste will also result in more being diverted from landfills than ends up in them. Businesses and institutions will be leaders in green procurement and collaborate to find efficiencies and reduce the community's overall resource consumption. These conscious choices will drive a vibrant green economy that attracts businesses looking to be a part of a sustainable community.

Community Materials and Resources Goals

- Promote awareness about the environmental impact of the different goods and services, as well as sustainable alternatives
- Find solution to reduce the amount of waste and improve recycling and composting throughout the community
- Promote the availability of locally and regionally produced goods and services

Village Materials and Resources Key Recommendations

- Consider enhancing green procurement practices that prioritizes sustainable goods and services
- Maximize the longevity of infrastructure and facilities to reduce the overall use of materials and resources in Village operations
- Seek ways to repurpose, recycle or use resources to their highest potential when they reach the end of their useful life
- Encourage economic development strategies that support green businesses and a circular economy¹⁴

¹⁴ A circular economy promotes product lifecycles that do not end with the landfill and instead allow for products to be repurposed or for materials to be recovered and recycled.

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Transportation and Transportation Facilities Background

There is an interdependent relationship between the built environment and the way people move. Automobile dependence is ingrained in the national culture and personal vehicles are a leading source of emissions, including in Downers Grove. The facilities that are needed to travel and park take up tremendous amounts of space, generally increase the risk of urban flooding, cause urban heat islands, and fragment natural habitats. It is unrealistic to expect that development patterns of the past 80 years can be changed quickly, but the community can pursue efforts to reduce the impact of transportation and transportation facilities. Roadways can be more than a means to move and parking lots can be more than a hardscape needed to park vehicles.

Transportation and Transportation Facilities Vision

By utilizing right-of-ways, Downers Grove's streets will effectively move people throughout the community and be viewed as natural corridors. A healthy urban forest that is supplemented by beneficial native plantings will improve ecological connectivity and enhance the character of streetscapes. A well connected network of bike and pedestrian facilities will allow people to move throughout the community without personal vehicles. Infrastructure that supports emerging alternatives to reduce tailpipe emissions will be available throughout the community, maintaining Downers Grove's regional connectivity by vehicle. Parking lots will also become opportunities to meet the community's energy goals, while strategically located public lots will continue to be utilized as programmable spaces.

Community Transportation and Transportation Facilities Goals

- Seek ways to further transform parkways into natural corridors
- Promote strategies that vehicle related emissions
- Minimize urban heat islands
- Reduce impervious surfaces related to transportation facilities

Village Transportation and Right-of-way Goals and Key Recommendations

- Develop strategies that utilize Village rights-of-way as a means of meeting carbonneutrality and habitat connectivity goals
- Consider the installation solar canopies in public parking lots and promote the installation of solar canopies in privately owned lots
- Promote the development of charging infrastructure throughout Downers Grove
- Seek to reduce the environmental impact of parking lots through stormwater and zoning regulations

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Governance Background

Balancing individual freedoms, the economic growth needed to maintain vibrant communities with a high quality of life, and the collective actions needed to reduce environmental impacts is complex. This is further compounded by the mismatch between government structures and the environmental issues that demand urgent attention. While governing is the fundamental act of government organizations carrying out their duty, governance can be understood as a more holistic process that includes collective action and decision making across both formal institutions, like government agencies, and informal networks, such as community organizations. As the Village and community seeks ways to become more sustainable while navigating these dynamics, fostering effective collaboration and shared goals will be essential.

Governance Vision

A collective pledge to be more sustainable as a community will result in an active effort to coordinate across local governments and community groups to find efficient and effective means of delivering high-quality public services in the least impactful way. The Village will seek to implement forward-thinking policies and innovative service delivery with a goal of empowering the community to achieve its sustainability goals. The Village will also be an active leader in regional efforts to share best practices and champion collective action to protect natural resources and reduce the region's environmental impact.

Community Governance Goals

- Inspire a culture of environmental stewardship and thoughtfulness about the natural world as a cornerstone of the community
- Collaborate with community organizations and other local government partners to ensure that residents and businesses are well-informed about the ways they can support community-wide and Village sustainability goals
- Support resident coordination, especially within neighborhoods, to promote neighborhood sustainability practices and projects

Governance Village Key Recommendations

- Explore policies to promote sustainable action in the community
- Continue to invest in projects and ongoing Village services that increase natural habitat, enhance community resilience, and reduce emissions
- Collaborate with other governmental entities to achieve community and regional sustainability goals
- Promote awareness of the Village's efforts and progress on achieving sustainability related goals

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Village of Downers Grove Environmental Concerns Commission

Civic Center 850 Curtiss Street October 28, 2024 Meeting Minutes

Chair Pelloso called the meeting to order at 7:05 pm and asked for a roll call.

Commissioner	Present	Absent
M. Bocker		х
P. Bolton	x	
L. Dantoft	х	
L. Donnelly	х	
K. Lerner	X	
B. Johnson	x	
L. Pelloso	X	

Also present: Jason Michnick, Environmental Sustainability Coordinator, Village of Downers Grove; Jay Womack (virtual)

Chair Pelloso declared a quorum present.

Minutes

A motion to approve the minutes from the August 26, 2024 meeting was made by K. Lerner. Seconded by L. Donnelly. The motion was carried unanimously by a voice vote.

Public Comment - Items not pertaining to the agenda

No comments were made by the public during this part of the meeting.

New Business

Review of Environmental Sustainability Plan Intro and Vision Sections

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J. Michnick shared a preliminary draft of the intro and vision sections of the ESP prior to the meeting. The draft has been developed as the Village Council has discussed the vision, goals, and key recommendations for the Comprehensive Plan. Their discussion and the structure of those documents have influenced how the ESP has been drafted. The commission discussed the draft and provided the following comments:

General Feedback on Structure and Language of Draft

The commission agreed that the initial draft was at times too verbose and preachy. While the ESP is intended to be a call to action to the community and inspire action, excessive wordiness can be distracting and make people want to stop reading. The commission also discussed the intended audience and agreed that the ESP should be written for the general public, not individuals who have a greater understanding of sustainability. Complicated sentence structures and overuse of technical terms will narrow the audience of the ESP. It was suggested that the plan should be tailored to an individual with a moderate reading level and little understanding of sustainability. However, there is an opportunity to educate and inform in the document. The use of appropriate graphics and formatting will be important.

The commission also desired the ESP to be more specific to Downers Grove. It is important to acknowledge environmental concerns, but the Village is not trying to fix global issues like climate change alone. Environmental issues can be referenced as a justification or basis but should not be an emphasis.

Feedback on Vision Statements, Goals, and Key Recommendations

J. Michnick explained that the final themes in the vision section were identified through a process of grouping general topic areas together and would hopefully provide the appropriate scope to include goals and objectives in later sections of the plan. The overall structure of the vision section includes an overall vision statement that is supported by five themes. Within the five themes are an intro background paragraph, thematic vision statement, a set of community-level goals, and key recommendations for Village action.

The commission discussed the overall choice of theme areas and agreed that energy, ecology, materials and resources, transportation and transportation facilities, and governance were appropriate themes to capture the breadth and interconnectedness of sustainability actions. Some discussion about alternative titles to transportation and transportation facilities, but no definitive alternative was provided. The commission did request a modified graphic demonstrating the relationships between theme areas as the initial graphic could be misconstrued.

Overall Vision Statement

The commission generally supported the overall vision statement with the suggested addition of trying to include language that discusses the importance of equity, especially as it relates to

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reducing negative impacts for vulnerable populations and equitable distribution of benefits of any public investment.

Energy

The commission did not suggest any major modifications to the energy subsection, but did state that somewhere in the plan should be a disclaimer that the list of goals and key recommendations is not exhaustive.

Ecology

The commission agreed that there were too many goals and key recommendations in the ecology theme. Each theme should limit the number of goals to three to four and key recommendations should be limited to five. Some of the goals were also too detailed and began to offer solutions. Community level goals should be high-level and provide flexibility to draft objectives that support the goal.

Materials and Resources & Transportation and Transportation Facilities

The commission suggested reducing the length of the background paragraphs in the materials and resources, and transportation and transportation facilities themes. Similar issues were also present with the amount of detail in the community goals and number of key recommendations.

Governance

The commission agreed that the background paragraph was not clear in defining the concept of governance. While it captured important tensions, the average reader would likely get confused in the points trying to be made. It was suggested that this be rewritten to clearly articulate the difference between governing (government carrying out their duties) and governance (a more holistic process that also includes informal institutions and community organizations). After clarification of the topic, the commission agreed that the goals and key recommendations generally capture the purpose of the theme, but did suggest that this theme was a good place to include a goal about environmental justice and equity.

Next Steps

The draft will be presented to Council in December after the commission's feedback has been incorporated into an updated draft. The commission will be reviewing one or two others sections at their next meeting. J. Michnick informed the commission that the next two regular ECC meetings will fall on the Monday of the week of Thanksgiving and Christmas. The commission discussed potential alternatives and requested that a survey be sent out asking for availability.

Public Feedback on Preliminary Draft

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David Rose asked a clarifying question about the timing of Village Council reviewing the updated draft and what the commission would review during its next meeting. Mr. Rose also stated that it was more difficult to hear the commission when they were seated at the dais. J. Michnick stated that he will learn how to control the microphones and audio so he can adjust the volume in the Council Chambers moving forward.

Adjournment

Motion to adjourn by L. DOnnelly. Seconded by P. Bolton. The motion to adjourn was carried on a voice vote. Meeting adjourned at 8:40.